Amendments to the Specification:

Please replace paragraph 28 with the following amended paragraph.

[0028] In Figs. 1(A), (B), Figs. 2, 3, and 4, the tube type pumping apparatus 1 comprises: a casing 2 having a rectangular cross section; a rotor 3 rotatably housed in housing hole 21 having a circular cross section on top of casing 2; a resilient tube 6 housed in housing hole 21 together with rotor 3 in such a manner that resilient tube 6 wraps around rotor 3; a decelerating gear mechanism for transmitting torque from stepping motor 11 and the driving source to rotor 3. Resilient tube 6 is positioned between roller 7 held by rotor 3 ~~for squeezing~~ and the inner wall 20 of housing hole 21.

Please replace paragraph 30 with the following amended paragraph.

[0030] Stepping motor 11 is arranged at the bottom of casing 2 and pinion 12 is attached to the output shaft of stepping motor 11. Gear 13 meshes with pinion 12 ~~in such a manner that~~ and gear 14 provided on the upper end of gear 13 meshes with gear 15 ~~is positioned in housing hole 21 toward the outside of shaft 23~~.

Please replace paragraph 31 with the following amended paragraph.

[0031] Rotor 3 is described herein. Rotor 3 is constructed with a roller such as squeezing member, roller holder 4, two rollers 7 for squeezing a tube, and a cam member 5.

Please replace paragraph 36 with the following amended paragraph.

[0036] Here, roller 7 which is a squeezing member has a curvature on roller surface 70 (squeezing surface) as illustrated in the exploded views in Figs. 6(A) and (B). This embodiment shows an example where both ends of roller 7 are provided with a raised portion 71 that gradually becomes thicker in the width direction wherein the center portion 74 is eroded.

Please replace paragraph 38 with the following amended paragraph.

[0038] As further illustrated in Figs. 5(A), (B), and (C), rib-like tube position regulating projections 40 serving as tube position regulating means are provided at the front end and rear end of roller 7 in such a manner that they limit positions of resilient tube 6 within the region defined by the circumferences of first supporting plate 41 and second supporting plate 42 and by the center of roller surface 70 in the width direction.

Please replace paragraph 46 with the following amended paragraph.

[0046] Here, when both ends of rotary center axis 75 of roller 7 slide across intermediate cam surface 502, torque is applied to roller holder 4, however, regulating projection 48 of roller holder 4 touches flat spring 29 and ~~breaks~~ brakes roller holder 4. As a result, roller holder 5 does not rotate together with cam member 5 until both ends of rotary center shaft 75 run onto squeezing cam surface 503. Both ends of rotary center axis 75 thus run on squeezing cam surface 503.

Please replace paragraph 49 with the following amended paragraph.

[0049] In this embodiment, an engagement mechanism (comprised of flat spring 29, regulating projection 48, first end plate 51, second end plate 52 and cam faces 502,503) is provided to move roller holder 4 and cam member 5 in a related manner after a given idle period elapses as cam member 5 begins to move.

Please replace paragraph 51 with the following amended paragraph.

[0051] In this embodiment of the present invention, regulating projection 48 and flat spring 29 together defining a regulating force generator apply the regulating force to roller holder 4 at intervals. In other words, the regulating force works when the timing is right. Until the right timing, there is a possibility that roller holder 4 rotates with the cam member 5 during the period in which the cam surface 50 moves roller 7 from the initial position (inward in a radial direction) to the squeezing position

(outward in a radial direction). However, duration of such a mutual rotation between squeezing member holder and the cam member is limited to the period defined by the duration before the arrival of right timing and the moment the regulating force begins working, which is negligibly short. In addition, the regulating force works at intervals, minimizing the torque applied to stepping motor 11, eliminating the need for the use of a larger size (power) motor and a significant increase in motor temperature.